

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY


(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 14 OCT 2005

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Applicant's or agent's file reference P.7444/St/LI		FOR FURTHER ACTION		See Form PCT/PEA/416
International application No. PCT/CH2004/000421		International filing date (day/month/year) 05.07.2004		Priority date (day/month/year) 09.07.2003
International Patent Classification (IPC) or national classification and IPC D21D5/26				
Applicant SULZER PUMPEN AG et al.				
<p>1. This report is the International preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> sent to the applicant and to the International Bureau a total of 5 sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>				
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input checked="" type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input checked="" type="checkbox"/> Box No. VIII Certain observations on the international application</p>				
Date of submission of the demand 22.04.2005		Date of completion of this report 13.10.2005		
Name and mailing address of the International preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized Officer Karlsson, L Telephone No. +49 89 2399-8424		



**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/CH2004/000421

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):*

Description, Pages

1, 3, 4, 6-11	as originally filed
2, 2a, 5	received on 22.04.2005 with letter of 18.04.2005

Claims, Numbers

1-15	received on 22.04.2005 with letter of 18.04.2005
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Drawings, Sheets

1/3-3/3	as originally filed
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- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/CH2004/000421

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-15
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-15
Industrial applicability (IA)	Yes: Claims	1-15
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

Re Item V.

1. The following document is referred to in this communication:

D1 : WO 92/03613 A (AHLSTROEM OY) 5 March 1992 (1992-03-05)

1.1 The present invention refers to a method of treating a pulp wherein the pulp is transferred from a first at least medium consistency to a second lower consistency. The pulp is degassed in a consistency higher than said second consistency, whereafter the pulp is pumped to the treatment taking place in the lower consistency. Subsequently the pulp is diluted to the second consistency prior to the treatment.

1.2 A method resp. an apparatus for degassing, diluting and treating a pulp is already known from D1. The difference between the present claim 1 and the disclosure of D1 lies in the fact that D1 starts out from a medium consistency pulp, whereas D1 uses a low consistency pulp, i.e. 3-5 % consistency. Indeed, the pulp may be degassed in both pumps (16) and (18) before it is diluted with the white water coming from pump (17). However, this distinguishing feature cannot be considered to be inventive for the following reasons: Firstly, the lowest value of the medium consistency pulps are rather close to the upper limit of the low consistency pulps, i.e. it does not necessarily involve an inventive step just to use a somewhat higher concentration of pulp. Thus, the skilled person would surely also be able to carry out the method of D1 on a somewhat higher concentration of the pulp, i.e. corresponding to the lower range of the medium consistency pulp.

Secondly, in e.g. D3:US-A-5 139 671 disclose an apparatus for treating medium consistency pulp, wherein said MD pulp also is diluted to a lower concentration, i.e. the above distinguishing features are as such already known. The skilled person would surely not have any problems in combining the disclosures of D1 and D3 arriving at the subject-matter of claims 1 and 12.

Thirdly, due to the presently very generally defined wording of claims 1 and 12, it is not possible to formulate any specific problem that should be solved by these features.

Thus, the requirements of Article 33.3 PCT are not satisfied with regard to D1 taken alone or in combination with D3.

1.3 Presently do the separate features of the dependent claims not seem to add any

novel and inventive matter with regard to the disclosure of D1 (Art.33.2 and 33.3 PCT). However, a combination of these features may nevertheless satisfy the requirements of Article 33.3 PCT.

2. Re Item VI

2.1 Reference is given to the document EP-A-1 416 084.

3. Re Item VII

3.1 D1 and/or D3 should be acknowledged in the description as representing closest prior art (Rule 5.1(a)(i)-(iv) PCT).

4. Re Item VIII

4.1 The present claim 1 lacks clarity, since it only very generally refer to different treatments of the pulp, without actually defining the type of treatment (Art.6 PCT).

4.2 The present claim 1 refer to process steps a to c. However, it is presently not clear if the sequence of these process steps must be applied as defined in claim 1 (Art.6 PCT). Indeed, process steps b) and c) are presently rather confusingly defined, since the pulp is pumped, at a lower consistency to the place where the treatment takes place, whereafter the pulp is diluted to the lower consistency, i.e. a clarification is necessary.

4.3 According to the present claim 11 it is preferred that the, e.g. washing is carried out at the low consistency, whereas claim 17 states that the washing preferable should be carried out at the higher consistency (Art.6 PCT).